

HEALTH  
A 31 JUL 1946  
O.R.

CASTLE DONINGTON RURAL DISTRICT COUNCIL.

Public Health Department,  
Council Offices,  
CASTLE DONINGTON,  
Near Derby.

20th July, 1946.

ANNUAL REPORT OF THE MEDICAL OFFICER OF  
HEALTH FOR THE YEAR 1945.

To the Minister of Health,  
The Chairman and Members of the  
Castle Donington Rural District Council.

Gentlemen,

In accordance with Ministry of Health Circular 28/46 dated 11th February, 1946, this report, on grounds of economy, is made as brief as possible. No statistical analyses are shown, but, as requested by the Minister, a note on the drinking water supply is included and copies of analyses are appended.

The high level of health of the population noted during the War years was maintained.

In the first three months of the year there was a wide epidemic of measles. Each of the eleven villages in the area was involved and there were two hundred and fifty nine cases. One hundred and fourteen cases were notified from Castle Donington and ninety seven from Kegworth. Bronchitis was a common complication and although there were a number of secondary pneumonias there were no deaths. For the second year in succession cases of whooping cough were few in number and mild in character. There were ten notifications compared with thirteen in 1944 and fifty seven in 1943. There was a total of thirty-four cases of scarlet fever, twenty two of them occurring in Kegworth. This number was slightly less than the average of the two preceding years.

As in previous years pneumonia occurred sporadically, most of the cases being notified from Castle Donington.

There was a fall from forty eight cases of dysentery in 1944 to nine in the year in review. Five of the cases were in non-civilians. Two more cases were children of a man recently discharged from the forces and himself found to be infected with Sonne dysentery. The remaining case had a history of a similar attack shortly after demobilisation.

There were no cases of diphtheria during the year. This was the first time, since records have been kept, that there were no cases of this dangerous disease to be noted in the Annual Report. In 1944 there was one case, in 1943 there were six, and in the year before forty-two.

All the medical practitioners in the area co-operated in working the Council's immunisation scheme. Great assistance was given by the Health Visitors attached to the County Council.

At the end of 1945 twelve hundred and nineteen children out of the estimated total of eighteen hundred and twenty eight had been immunised. Although this aggregate was good, the percentage of immunised pre-school age children was still much too low. The occurrence of epidemic diphtheria might have serious consequence in this group.

The death rate was 11.5 per thousand total population, the rate for England and Wales being 11.4. The corrected total live births was one hundred and thirty-four to give a live birth rate of 16.8. The rate for England and Wales was 16.1. The still birth rate for the area was 0.5 and for England and Wales it was 0.46. There were four still births.



Five children died under one year of age. This gave an infantile death rate of 37 per thousand related births. The comparable figure for England and Wales was 46. There were no deaths from diarrhoea or enteritis in children under two years. The rate for England and Wales was 5.6.


The supply of drinking water was satisfactory both as regards quality and quantity, but complaints of low pressure were made from time to time by householders in The Barroon and Park Lane districts of Castle Donington.

I am, Gentlemen,

Your obedient Servant,

T. M. MONTFORD,

Medical Officer of Health.



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APPENDAGE TO ANNUAL REPORT, 1945.

WATER SUPPLY.

Bacteriological Samples Taken.

Leicester Corporation	Every month. (All satisfactory)
Loughborough Corporation	Fortnightly (All satisfactory)
Long Eaton U.D.C.	Monthly (All satisfactory)

Chemical Samples Taken.

11/10/1945  
(Copy below)

26/6/1945  
(Copy below)

-

CASTLE DONINGTON RURAL DISTRICT COUNCIL.

Kegworth (Leicester Tap supply)	Satisfactory.
Long Whaddon (Loughborough Tap supply)	Satisfactory.
Castle Donington (Long Eaton and Leicester Tap Supply)	Satisfactory

Particulars of the proportion of dwelling houses and population supplied from public mains :-

Houses in district	2401
Houses supplied by public mains	1918
Proportion of houses on mains	79.8%
Proportion of population on mains	80.0%

ANALYSIS OF A SAMPLE OF WATER RECEIVED ON 27th June, 1945 from BOROUGH OF LOUGHBOROUGH.

Labelled - Tap at Fuller & Hamblys, Hathern.

Date 26/6/45.

CHEMICAL RESULTS IN PARTS PER 100,000

Appearance	Clear and bright		
Colour	Hazen: 15	Odour	Nil
	Slight yellow-brown		
Reaction	pH Neutral 7.2	Free Carbonic Acid	0.8
Electric Conductivity at 20° C.	340	Total Solids dried at 180° C.	23.0
Chlorine in Chlorides	1.6	Alkalinity as calcium Carbonate	9.0
Hardness	Total 17.5	Temporary 7.0 Permanent	10.5
Nitrogen in Nitrates	0.20	Nitrogen in Nitrites	Less than 0.001
Free Ammonia	0.022	Ammoniacal Nitrogen	---
Albuminoid Ammonia	0.0084	Albuminoid Nitrogen	---
Oxygen Absorbed in 4 hours at 27° C.	0.145		
Metals	Absent		
Free chlorine reaction	Absent		

BACTERIOLOGICAL RESULTS.

(Bacteriological sample decanted immediately on collection)

1 day at 20° C. 2 days at 37° C. 3 days @ 20° C.

Number of "Bacteria" growing on Agar per cc. or ml. in	1	1	30
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1. 1990年12月15日，在“九七”香港回归前，香港各界人士纷纷发表文章，就香港前途问题提出自己的看法。

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*Journal of Management Studies*, 19(1), 67-80.

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1. *Phragmites* (Common Reed)

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|-------------------------------|---------|----------|--------|----------|
| Presumptive coliform reaction | Present | -        | Absent | 100 c.c. |
| Bact. coli.                   | Present | -        | Absent | 100 c.c. |
| Cl. welchii Reaction          | Present | 100 c.c. | Absent | 10 c.c.  |

This sample is clear and bright in appearance, neutral in reaction and free from iron and other metals. It is moderately hard in character and contains no excess of salinity or mineral constituents in solution. It has very faint colour but is of satisfactory organic quality and of a high standard of bacterial purity.

These results are consistent with a wholesome water suitable for public supply purposes.

REPORT ON A SAMPLE OF WATER FROM DERWENT WATER VALLEY BOARD, BAMFORD,  
on October 12th, 1945.

MARK FILTERED WATER FROM OUTLET OF BURBAGE SYPHON, GRINDLEFORD,  
October 11th. 1945.

PHYSICAL CHARACTERS.

|                                  |                                  |
|----------------------------------|----------------------------------|
| Suspended matter                 | faint trace (containing Alumina) |
| Appearance of a column 2 ft long | clear : faintly yellowish        |
| Hazen colour                     | 5. 0                             |
| Taste                            | normal                           |
| Odour                            | none                             |

CHEMICAL EXAMINATION

|                                   | Parts per 100,000 |
|-----------------------------------|-------------------|
| Total Solids dried at 180 C       | 7.15              |
| Chlorides in terms of Chlorine    | 1.20              |
| Equivalent to Sodium Chloride     | 1.97              |
| Nitrites                          | none              |
| Nitrates as Nitrogen              | 0.030             |
| Poisonous Metals (Leads etc)      | none              |
| Oxygen Absorbed in 4 hrs. at 80 F | 0.071             |
| Ammoniacal Nitrogen               | 0.0022            |
| Albuminoid Nitrogen               | 0.0048            |
| Free Carbon dioxide               | 0.30              |
| Residual Alumina in solution      | None              |
| Residual Alumina in suspension    | faint trace       |
| pH value                          | 6.8               |

MINERAL ANALYSIS

|  |       |
|--|-------|
| Silica   | 0.57  |
| Alumina and Iron Oxide                             | 0.11  |
| Lime in terms of CaO                               | 1.35  |
| Magnesia in terms of MgO                           | 0.50  |
| Sulphates in terms of SO <sub>3</sub>              | 1.68  |
| Chlorides in terms of Cl                           | 1.20  |
| Nitrates in terms of N <sub>2</sub> O <sub>5</sub> | 0.12  |
| Carbonates in terms of CO <sub>2</sub>             | 0.55  |
| Total Iron in terms of Fe                          | 0.025 |

Probable combination of Mineral Constituents:-

|                        |             |
|------------------------|-------------|
| Silica                 | 0.57        |
| Alumina and Iron Oxide | 0.11        |
| Calcium Carbonate      | 1.25        |
| Calcium Sulphate       | 1.58        |
| Magnesium Sulphate     | 1.13        |
| Magnesium Chloride     | 0.28        |
| Sodium Sulphate        | - -         |
| Sodium Chloride        | 1.65        |
| Sodium Nitrate         | 0.18        |
|                        | <u>6.75</u> |

Calculated Hardness.

|           |            |
|-----------|------------|
| Temporary | 1.3        |
| Permanent | 2.4        |
|           | <u>3.7</u> |

REMARKS. The oxygen absorbed and Albuminoid Nitrogen figures are reasonably low and show the water to be of a satisfactory degree of organic purity. The slightly high Ammoniacal figure may be due to reduction of Nitrates.

With regard to residual alumina, the faint trace of suspended matter was found to contain alumina, although the amount present was too small to determine. There was no alum in solution.



